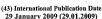
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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: ABSORBABLE SOLID COMPOSITIONS FOR THE TOPICAL TREATMENT OF ORAL MUCOSAL DISORDERS

(57) Abstract: Bioadhesive sticker tablets which are applied directly to vaginal, rectal and/or oral mucosa are described herein. In one embodiment, the sticker tablets are applied directly to ulcers or lesions in the oral cavity. The compositions adhere immediately upon administration, swell over time, and remain adherent to the ulcer or lesion for at least 60 minutes. The compositions can be in the form of single layer, double layer, or multilayer sticker tablets. The compositions provide immediate pain relief to the patient and promote rapid healing of the ulcer or lesion. The sticker tablet compositions contain one or more bioadhesive polymers. In one embodiment, the polymers are crosslinked polycarboxylic acids and polyols. The compositions contain at least one herbal agent and/or irritating compound, and optionally, a non-herbal active agent. The compositions can deliver a non-irritating effective dose of the agent for at least 60 minutes. The compositions described herein are stable upon storage for six months or longer.

A. CLASSIFICATION OF SUBJECT MATTER INV. A61K9/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data

C. DOCUMEN	TS	CONSIDERED TO BE RELEVANT	

X Further documents are listed in the continuation of Box C.

TOTAL IN THE TOTAL

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
х	US 4 307 075 A (MARTIN FREDERICK H) 22 December 1981 (1981-12-22)	1,3,5,6, 8,12,13, 15-17, 21-23
	column 3, line 22 - line 41 example 10	21-23
х	EP 1 236 466 A (EFRAT BIOPOLYMERS LTD [IL]) 4 September 2002 (2002-09-04) claims; examples	1-23
X	WO 00/59423 A (WATSON PHARMACEUTICALS INC [US]) 12 October 2000 (2000-10-12)	1-5, 7-13, 15-23
	examples	

Special categories of cited documents: 'A' document defining the general state of the ant which is not considered to be of particular relevance 'E' earlier document but published on or after the international stiling date. 'C document which may throw could be my individually or earlier of the selection may throw could be my individually or earlier challon or other special resonal one specified or earlier challon or other special resonal one specified or of other means. 'O' document referring to an orad disclosure, use, exhibition or other means. 'P' document published prior to the international filling date but later than the protring date claimed.	"T" later document published after the International filling date closed to the control of the special part of the control of the special part of the control of the contro
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Name and mailing address of the ISA' European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Pillswiff, Tol. (+31-70) 340-2040, Fac. (+31-70) 340-3016	Authorized officer Boulois, Denis

X See patent family annex.

Continua	Inuation). DOCUMENTS CONSIDERED TO BE RELEVANT						
legory*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.					
1	SALAMAT-MILLER N ET AL: "The use of mucoadhesive polymers in buccal drug delivery" ADVANCED DRUG DELIVERY REVIEWS, ELSEVIER BY, AMSTERDAM, NL, vol. 57, no. 11, 3 November 2005 (2005-11-03), pages 1666-1691, XP025284004 ISSN: 0169-409X [retrieved on 2005-11-03] table 2	1-23					
	SUDHAKAR Y ET AL: "Buccal bioadhesive drug delivery - A promising option for orally less efficient drugs" JOURNAL OF CONTROLLED RELEASE, ELSEVIER, AMSTERDAM, NL, vol. 114, no. 1, 10 August 2006 (2006-08-10), pages 15-40, XP024957869 ISSN: 0168-3659 [retrieved on 2006-08-10] table 1	1-23					
, X	BOAZ MIZRAHI ET AL: "Mucoadhesive Tablet Releasing Iodine for Treating Oral Infections" J. OF PHARMACEUTICAL SCIENCES, vol. 96, no. 11, 27 August 2007 (2007–08–27), pages 3144–3150, XP002536474 the whole document	1-23					

Information on patent family members

From PCT/ISS/910 (colors) (and a support (And) cones

PCT/IB2007/004665

 Patent document cited in search report		Publication date		Patent family member(s)		Publication date
 US 4307075	Α	22-12-1981	NONE			
EP 1236466	Α	0409-2002	NONE			
WO 0059423	А	12-10-2000	AU AU CA EP US US	764912 4178600 2333156 1089686 6210699 2001051186	A A1 A1 B1	04-09-2003 23-10-2000 12-10-2000 11-04-2001 03-04-2001 13-12-2001